

Trimester	Unit Title	Recommended Instructional Days
2	Relate Multiplication and Area	8-10 days
Domain: Measurement		
<p><i>Strand:</i></p> <p> 3.M.B.3 Recognize area as an attribute of plane figures and understand concepts of area measurement.</p> <p>a. A square with side length 1 unit, called “a unit square,” is said to have “one square unit” of area, and can be used to measure area.</p> <p> 3.M.B.3 Recognize area as an attribute of plane figures and understand concepts of area measurement.</p> <p>b. A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units.</p> <p> 3.M.B.4 Measure areas by counting unit squares (square cm, square m, square in, square ft, and nonstandard units).</p> <p> 3.M.B.5 Relate area to the operations of multiplication and addition.</p> <p>a. Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths.</p> <p> 3.M.B.5 Relate area to the operations of multiplication and addition.</p> <p>b. Multiply side lengths to find areas of rectangles with whole number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning.</p> <p> 3.M.B.5 Relate area to the operations of multiplication and addition.</p> <p>c. Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and $b + c$ is the sum of $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning.</p>		

 **3.M.B.5** Relate area to the operations of multiplication and addition.

d. Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.

Key:



Major Cluster



Supporting Cluster



Additional Cluster



Climate Change Opportunity

Progress Indicator: ◊ Tests ◊ Homework / Classwork ◊ Projects ◊ Formative assessments ◊ Summative assessments ◊ Performance assessments

Mathematical Practices:

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reason of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Recommended Activities, Investigations, Interdisciplinary Connections, and/or Student Experiences to Explore NJSLs-CLKS within Unit

Essential Questions:

Lesson 8.1: How is finding the area of a figure different from finding the perimeter of a figure? How can you find the area of a plane figure?

Lesson 8.2: How can you estimate the area of a plane figure?

Lesson 8.3: Why can you multiply to find the area of a rectangle?

Lesson 8.4: How can you use the strategy, *find a pattern*, to solve area problems?

Lesson 8.5: How can you break apart a figure to find the area?

Essential Understandings:

Lesson 8.1: Area and perimeter measure two different things.

Lesson 8.2: There can be no gaps or overlapping squares when counting for area.

Lesson 8.3: Area can be related to addition and multiplication by using area models.

Lesson 8.4: Area problems can be solved by using the strategy, *find a pattern*.

Lesson 8.5: The Distributive Property can be applied to area models and to find the area of combined rectangles.

Vocabulary:

- area
- unit square
- square unit
- square inch

Suggested Activity Description:

Waggle, On the Spot Videos, Tier 2 and 3 Intervention Resources, Vocabulary Activities, Grab and Go Differentiation Kit, Explore and Guided/Independent Practice related to the NJSLS, Essential Question Discussion and Check-In, Share and Show, Basic Skills Review, Manipulative Activity, Reteach Activity, Reading Strategies Activity, Making Connections, Multilingual Support, Performance Task, Enrich Activity, Exit Ticket

Interdisciplinary Connections:

Language Arts:

1. Problem #8 on TB page 411.
2. Problem #6 on TB page 417.
3. Problem #8 on TB page 423.

Art:

1. Problem #7 on TB page 416.

Physical Education:

1. Problem #12 on TB page 424.
2. Problem #7 on TB page 430.

Spot Light On: *Use multiple ways of assessing student understanding.*

Social and Emotional Learning: <i>Competencies</i>	Social and Emotional Learning: <i>Sub-Competencies</i>
SEL Competencies: <ul style="list-style-type: none"> • Self- awareness • Social Awareness • Self- Management • Relationship Skills • Responsible Decision-Making 	<ul style="list-style-type: none"> • Recognizing the importance of self-confidence in handling daily tasks and challenges. • Demonstrate an awareness of the expectations for social interactions in a variety of ways. • Demonstrate an understanding of the need for mutual respect when viewpoints differ.

		<ul style="list-style-type: none"> • Identify and apply ways to persevere through alternative methods to achieve goals. • Utilize positive communication and social skills to interact effectively with others. • Develop, implement, and model effective problem solving and critical thinking skills. 	
Assessments (Formative) <i>To show evidence of meeting the standard/s, students will successfully engage within:</i>		Assessments (Summative) <i>To show evidence of meeting the standard/s, students will successfully complete:</i>	
Formative Assessments: • Teacher Observations • Exit Tickets • Quizzes • Self Assessments • Math Journals • Homework/Classwork • Teacher created assessments		Benchmarks & Summative Assessments: Chapter/Unit Assessments • Standardized Tests • Project-based Assessments	
Differentiated Student Access to Content: Teaching and Learning <i>Resources/Materials</i>			
Core Resources	Alternate Core Resources <i>IEP/504/At-Risk/ESL</i>	ELL Core Resources	Gifted & Talented Core Resources
Go Math Workbook, Interactive Student Edition, ST MATH 60 minutes a week, Waggle, Math on the Spot Videos, iReady, Khan Academy, Illustrative Mathematics, Learn360, TeacherTube, BrainPOP, Freckle, LearnZillion, MobyMax, Achieve the Core, Desmos, RTI	Reteaching worksheets, Skill building workbook, Math manipulatives, iTools, Leveled practice worksheets	Multilingual glossary, eGlossary, Multilingual Activities on ED, Vocabulary Cards, Success for English Learners worksheets, Leveled Strategies for English Learners, Linguistic Support	ST MATH special projects, Enrichment worksheets, Art of Problem Solving, Leveled assessments
Supplemental Resources			
Technology: • Chromebooks • Online math manipulatives Other: • Google Classroom, Google Meets, Schoology, Interactive Workbooks • Illustrative Mathematics • insidemathematics.org • National Library of Virtual Manipulatives			

Differentiated Student Access to Content: Recommended <i>Strategies & Techniques</i>			
Core Resources	Alternate Core Resources <i>IEP/504/At-Risk/ESL</i>	ELL Core Resources	Gifted & Talented Core
Deliver instruction utilizing varied learning styles including audio, visual, and tactile/kinesthetic, provide individual instruction as needed, modify assessments and/or rubrics, repeat	Utilize a multi-sensory (VAKT) approach during instruction, provide alternate presentations of skills by varying the method (repetition, simple explanations, additional examples, modeling, etc.), modify test content and/or format, allow students to retake test for additional credit, provide additional times and preferential seating as needed, review, restate and repeat directions, provide study guides, and/or break assignments into segments of shorter tasks.	Extend time requirements, preferred seating, positive reinforcement, check often for understanding/review, oral/visual directions/prompts when necessary, supplemental materials including use of an online bilingual dictionary, and modified assessment and/or rubric.	Create an enhanced set of introductory activities, integrate active teaching/learning opportunities, incorporate authentic components, propose interest-based extension activities, and connect student to related

NJSLS CAREER READINESS, LIFE LITERACIES & KEY SKILLS	Disciplinary Concept(s): Leadership	
	Core Ideas:	Curiosity and willingness to try new ideas (intellectual risk taking) contributes to the development of creativity and innovation.
	Performance Expectation/s:	9.4.5.CI.3: Participate in a brainstorming session with individuals with diverse perspectives to expand one’s thinking about a topic of curiosity.
	Career Readiness, Life Literacies, & Key Skills Practices	
	Act as a responsible and contributing community member and employee. Attend to financial well-being. Consider the environmental, social and economic impacts of decisions. Demonstrate creativity and innovation. Utilize critical thinking to make sense of problems and persevere in solving them.	

	<p>Model integrity, ethical leadership and effective management. Plan education and career paths aligned to personal goals. Use technology to enhance productivity, increase collaboration and communicate effectively. Work productively in teams while using cultural/global competence.</p>
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New Jersey Legislative Statutes and Administrative Code (place an "X" before each law/statute if/when present within the curriculum map)							
Amistad Law: <i>N.J.S.A. 18A 52:16A-88</i>		Holocaust Law: <i>N.J.S.A. 18A:35-28</i>		LGBT and Disabilities Law: <i>N.J.S.A. 18A:35-4.35</i>	X	Diversity & Inclusion: <i>N.J.S.A. 18A:35-4.36a</i>	Standards in Action: <i>Climate Change</i>